

### **PRELIMINARY REMARKS**

The Applicant acknowledges the cancellation of claims 23-26 in the previous Reply, which was not properly noted in the presentation of claims. The Applicant apologizes for this oversight.

### **REMARKS**

This responds to the Office Action mailed on August 21, 2007.

Claims 23-26 are canceled. As a result, claims 1-6, 8, 11 and 12 are now pending in this application.

#### **§102 Rejection of the Claims**

Claim 1 was rejected under 35 USC § 102(b) as being anticipated by Okazaki et al. (U.S. 4,723,903). The Applicant respectfully traverses this rejection and requests the Office to consider the following.

“A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” (*Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987), M.P.E.P. §2131, 8<sup>th</sup> Ed., Rev. 4).

Claim 1 requires “... a first coating over the first major surface of the substrate [the substrate having an embossing profile]”. Okazaki does not teach anywhere the first coating is over substrate. Rather, Okazaki’s coatings are filled with holes, some of which expose the substrate. Withdrawal of the rejections is respectfully requested.

Claim 1 was also rejected under 35 USC § 102(b) as being anticipated by DePuydt et al. (U.S. 6,030,556). The Applicant respectfully traverses this rejection.

The **Response to Arguments** section, beginning at page 13 of the Office Action, states “[e]ven though DePuydt, et al. has stated that the dielectric layer and the cap layer *can be made of materials that are the same or materials derived from the same list, it does not imply that the material chosen for the layer have to be identical to each other.*” (Emphasis in original). The Applicant has carefully reviewed the previous Response and can neither find the word

“identical” nor an assertion tantamount to “identical”. The Applicant therefore respectfully but strenuously disagrees. DePyudt’s teaching as a whole cannot suggest the cap layer 50 has “non-adhesive” qualities. And the question of whether the material is or is not identical, is not the same as whether DePyudt teaches or suggests there is a difference in adhesion or non-adhesion appreciated by DePyudt. The Table illustrates Depyudt’s teaching to this effect, with the teaching for layer 44 at column 7, lines 46-58, and the teaching for layer 50 beginning at column 7, line 66 and ending at column 8, line 9. One will notice, not that DePyudt is necessarily teaching identical materials. Rather, one will notice that DePyudt is necessarily teaching similar qualities of materials. Consequently, DePyudt does not anticipate what is claimed.

The <b>dielectric material 44</b> can be any suitable material, but examples of some suitable materials include, but are not limited to:	Examples of some suitable materials for the <b>cap layer 50</b> include dielectric materials such as
aluminum oxide, silicon dioxide, yttrium oxide, silicon carbide, borosilicate glass, borophosphosilicate glass, tantalum oxide, silicon nitride, chrome oxide, nickel oxide, and combinations thereof.	aluminum oxide, silicon dioxide, yttrium oxide, silicon carbide, borosilicate glass, borophosphosilicate glass, tantalum oxide, silicon nitride, chrome oxide, nickel oxide, and combinations thereof.
The <b>dielectric material 44</b> can be deposited by any suitable method, such as physical deposition (e.g., sputtering or evaporation) or chemical vapor deposition.	The <b>cap layer 50</b> can be deposited by any suitable method, such as physical deposition (e.g., sputtering or evaporation) or chemical vapor deposition.
The thickness of the <b>dielectric layer 44</b> is preferably about 5 nanometers to about 200 nanometers, more preferably about 10 nanometers to about 50 nanometers.	The thickness of the upper layer of <b>cap layer 50</b> is preferably about 5 nanometers to about 200 nanometers, more preferably about 10 nanometers to about 50 nanometers.

DePyudt demonstrates by these utterances, that he neither teaches nor appreciates that these layers should be different in adhesive and non-adhesive qualities. Because DePyudt does not teach all the limitations of claim 1, DePyudt does not anticipate the claim. Withdrawal of the rejection is respectfully requested.

Claim 1 was rejected under 35 USC § 102(e) as being anticipated by Homola et al. (U.S. 2004/0202865 A1). The Applicant respectfully traverses this rejection.

Homola et al. is defective, however, as a reference as it cites to FIG. 1B, and no FIG. 1B is in the disclosure. This is an oversight that renders the reference non-enabling. Further, since Homola teaches his polymer coating 120 is capable of forming “strong covalent bonds with the surface of metal or metal alloy stamper ...” (Homola at page 2, paragraph [0021]), Homola does not teach the limitations of claim 1. Withdrawal of the rejection is respectfully requested.

Claim 23 was also rejected under 35 USC § 102(b) as being anticipated by Okazaki et al. Claim 23 has been canceled.

Claim 23 was also rejected under 35 USC § 102(e) as being anticipated by Homola et al. Claim 23 has been canceled.

Claim 23 was also rejected under 35 USC § 102(e) as being anticipated by Wago et al. (U.S. 6,869,557). Claim 23 has been canceled.

Claims 23 and 24 were also rejected under 35 USC § 102(b) as being anticipated by Kyminas et al. (U.S. 4,474,920). Claims 23 and 24 have been canceled.

### §103 Rejection of the Claims

Claims 2, 3, 5, and 6 were rejected under 35 USC § 103(a) as being unpatentable over Okazaki et al. or DePuydt et al. in view of Öhman et al. (U.S. 6,454,970) and further in view of Imatomi (U.S. 2006/0051453 A1).

The Applicant has demonstrated the deficiencies of Okazaki and DePuydt as set forth in the traversals of these references above. The Office asserts “that Okazaki, et al. teach that the stamper can be comprised of multiple layers of metal film over the substrate base.” (Office Action at page 6). But Okazaki teaches intermittent layers that expose the substrate base, and hence cannot teach what is claimed in claim 1. The Office further admits that “Okazaki, et al. and DePuydt, et al. ... do not teach the specific metals in a multi-layered stamper ....” (Office Action at page 6).

Claim 1 requires the substrate to be “made of a first metal”, and Öhman’s substrate, item 62, is a polymer. (Öhman at col. 19, line 29). Item 3a is the article that is being impressed by the structure 7, 41, 62, and the item 62 is also a polymer “supporting layer”. Therefore, neither Okazaki, nor, DePuydt, nor Öhman teach all the elements of claim 1, alone or in combination. The Office next turns to Imatomi. The structure in Imatomi described by the Office, however, is a weir component of a mold device. This structure, a weir, is an overflow device that does not have anything to do with the actual molding. Further, Imatomi has to do with injection molding of an article, and not with embossing. The cited references are not related in field of endeavor. Because there no motivation to combine Öhman, Okazaki, and Depuydt with Imatomi, and

because the combination does not teach all the claim limitations, withdrawal of the rejections is respectfully requested.

Claim 4 was also rejected under 35 USC § 103(a) as being unpatentable over Okazaki et al. or DePuydt et al. in view of Cheung et al. (U.S. 6,210,514).

The deficiencies of Okazaki and Depuydt noted above are incorporated herein by reference. Cheung has to do with build-up technology, and not embossing technology. That a given compound is taught in Cheung, does not amount to a teaching in any of the cited references to collect all the other cited references to make claim 4 obvious. Further, Applicant has demonstrated that Öhman cannot be combined with Imatomi. Further, Imatomi has to do with injection molding of an article, and not with embossing. The cited references are not related in field of endeavor. Because there no motivation to combine Öhman with either of Imatomi or Cheung, and because the combination does not teach all the claim limitations, withdrawal of the rejections is respectfully requested.

Claim 8 was also rejected under 35 USC § 103(a) as being unpatentable over Okazaki et al. or DePuydt et al. in view of Ohman et al., further in view of Imatomi and further in view of Cheung et al. The Office Action admits that the cited references do not teach a second coating of polyparaxylene. But Cheung has to do with build-up technology, and not embossing technology. That a given compound is taught in Cheung, does not amount to a teaching in any of the cited references to collect all the other cited references to make claim 4 obvious.

Claim 11 was also rejected under 35 USC § 103(a) as being unpatentable over Okazaki et al., DePuydt et al. or Homola et al., in view of Wago et al. The deficiencies of Okazaki, DePuydt, and Homola noted above are incorporated herein by reference. Because claim 11 claims specific structure, that Wago may teach heating and pressure stamping apparatus, does not fill the voids left by the other cited references.

Claim 12 was also rejected under 35 USC § 103(a) as being unpatentable over Okazaki et al. in view of Imatomi. The deficiencies of Okazaki and Imatomi noted above are incorporated herein by reference.

Claim 25 was also rejected under 35 USC § 103(a) as being unpatentable over Okazaki et al. or Wago et al. in view of Imatomi. Claim 25 was canceled.

Claim 26 was also rejected under 35 USC § 103(a) as being unpatentable over Okazaki et al. or Wago et al. in view of Imatomi and further in view of Cheung et al. Claim 26 was canceled.

### **RESERVATION OF RIGHTS**

In the interest of clarity and brevity, Applicant may not have addressed every assertion made in the Office Action. Applicant's silence regarding any such assertion does not constitute any admission or acquiescence. Applicant reserves all rights not exercised in connection with this response, such as the right to challenge or rebut any tacit or explicit characterization of any reference or of any of the present claims, the right to challenge or rebut any asserted factual or legal basis of any of the rejections, the right to swear behind any cited reference such as provided under 37 C.F.R. § 1.131 or otherwise, or the right to assert co-ownership of any cited reference. Applicant does not admit that any of the cited references or any other references of record are relevant to the present claims, or that they constitute prior art. To the extent that any rejection or assertion is based upon the Examiner's personal knowledge, rather than any objective evidence of record as manifested by a cited prior art reference, Applicant timely objects to such reliance on Official Notice, and reserves all rights to request that the Examiner provide a reference or affidavit in support of such assertion, as required by MPEP § 2144.03. Applicant reserves all rights to pursue any cancelled claims in a subsequent patent application claiming the benefit of priority of the present patent application, and to request rejoinder of any withdrawn claim, as required by MPEP § 821.04.

**CONCLUSION**

Applicant respectfully submits that the claims are in condition for allowance and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney ((801) 278-9171) to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully submitted,

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